



**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

RE: APPLICATION BY T-MOBILE  
NORTHEAST LLC FOR A  
CERTIFICATE OF ENVIRONMENTAL  
COMPATIBILITY AND PUBLIC NEED  
FOR A TELECOMMUNICATIONS FACILITY  
AT 158 EDISON ROAD IN THE TOWN  
OF TRUMBULL, CONNECTICUT

DOCKET NO. \_\_\_\_\_

Date: August 1, 2011

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ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED**

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Pursuant to General Statutes § 16-50g *et seq.* and § 16-50j-1 *et seq.* of the Regulations of Connecticut State Agencies, T-Mobile Northeast LLC ("T-Mobile") submits this Application for a Certificate of Environmental Compatibility and Public Need ("Certificate") for the construction, maintenance and operation of a wireless telecommunications facility ("Facility") at 158 Edison Road in the Town of Trumbull ("Application").

**I. EXECUTIVE SUMMARY**

T-Mobile seeks to construct, maintain and operate the Facility on property known as 158 Edison Road in Trumbull ("Property"). The Facility would provide needed coverage to Route 15, Main Street and Highgate Road, as well as the surrounding area. The proposed Facility would also provide future capacity relief and performance improvements to the existing facilities nearest the coverage objective.

The Facility would replace an existing lattice tower used by the Town of Trumbull ("Town") for emergency services communication, which is approximately 100 feet above grade level ("AGL"). The existing lattice tower is approximately 30 years old and

nearing the end of its life cycle. The Town would like to replace the existing lattice tower with a new, taller structure to accommodate the Town's police, fire and emergency services current and future communication needs. The existing tower, at its current height, does not address the Town's communication needs sufficiently.

The Facility would consist of a 150 foot monopole structure, with T-Mobile's antennas flush mounted at a centerline of 140 AGL. The Facility would also host a regional dispatch platform for emergency services situated atop the monopole. The height and configuration of the regional dispatch platform would be dictated by the needs and specifications of the Town. As designed currently, the regional platform would incorporate stealth characteristics, such as slim profile antennas, painted blue to match the sky background, and a slim profile mounting. T-Mobile's equipment would be located nearby on a concrete equipment pad. The municipal equipment would be located in a separate shelter adjacent to the area leased by T-Mobile.

The Facility would sit within a 490 square foot area leased by T-Mobile, located in the center of the Property, which is an approximately 2.30 acre parcel. The Property is currently used as the Town's police station. An 8 foot high chain link fence, with privacy slats, would secure the equipment at the Facility. Vehicle access would be along an existing bituminous access and parking area used by the police station.

This Application includes a copy of the Council's Community Antenna Television and Telecommunication Facilities Application Guide with references to this Application, attached as Exhibit A. The Application also includes the lease, survey-based plans for the proposed Facility and a topography map, attached hereto as Exhibits B, C and D, respectively, and other information detailing the proposed Facility. The reports and

supporting documentation included in this Application contain the relevant site specific information required by statute and the Council's regulations.

## **II. BACKGROUND INFORMATION**

### **A. The Applicant**

T-Mobile is a limited liability company, organized under the laws of Delaware, with a Connecticut office at 35 Griffin Road South, Bloomfield, Connecticut 06002. The company and its affiliated entities are licensed by the Federal Communications Commission ("FCC") to construct and operate a personal wireless services system in Connecticut, which has been interpreted as a "cellular system" within the meaning of General Statutes § 16-50i (a) (6). T-Mobile does not conduct any other business in the State of Connecticut other than the provision of cellular services under FCC rules and regulations. T-Mobile is committed to use the proposed Facility as the anchor tenant. Communications regarding the Application should be to T-Mobile's attorneys as follows:

Cohen and Wolf, P.C.  
1115 Broad Street  
Bridgeport, CT 06604  
Telephone: (203) 368-0211  
Attention: Julie D. Kohler, Esq.  
Jesse A. Langer, Esq.

### **B. Application Fee**

The estimated construction cost for the Facility is \$250,000.00. In accordance with § 16-50v-1a (b) of the Regulations of Connecticut State Agencies, a check made payable to the Council in the amount of \$1,250.00 accompanies this Application.

**C. Compliance with General Statute § 16-50/ (c)**

T-Mobile is not engaged in generating electric power in the State of Connecticut; thus, the proposed Facility is not subject to General Statutes § 16-50r. The proposed Facility has not been identified in any annual forecast reports and, therefore, is not subject to General Statute § 16-50/ (c).

**D. The Facility's Initial Configuration**

The Facility's initial configuration included a 150 foot monopole, with T-Mobile's antennas mounted on T-arms at 140 feet AGL. According to the Town's specifications, the regional dispatch platform would sit atop the monopole equipped with 3 whip antennas at 10'3", 4 whip antennas at 17'6", 2 dipoles at 10'5" and 1 dipole at 23'4". The regional dispatch platform would consist of a circular platform with a walkway for maintenance workers. The total height of the Facility to the top of the tallest municipal antenna would be approximately 173'4" AGL. These specifications are depicted in T-Mobile's Technical Report, submitted to the Town on December 23, 2009. See Bulk Filing, submitted contemporaneously with this Application.

After an extensive consultation with the Town, the Town's consultant and members of the community, T-Mobile agreed to reconfigure the Facility to incorporate stealth measures into the design of the monopole and equipment compound. Additionally, the Town agreed to modify the regional dispatch platform and antennas to minimize the potential visual impact. The reconfiguration accommodates many of the requests made by the community representatives involved in the municipal consultation. These modifications are discussed in Parts VI, VII.A and IX, *infra*, and depicted in the survey-based plans, included with the Application as Exhibit C.

### **III. SERVICE AND NOTICE REQUIRED BY GENERAL STATUTE § 16-50/ (b)**

Pursuant to General Statutes § 16-50/ (b), T-Mobile sent copies of this Application to municipal, regional, State, and Federal officials. A certificate of service, along with a list of the parties served with a copy of the Application, is attached hereto as Exhibit E. T-Mobile has published notice of its intent to file this Application on two occasions in the *Connecticut Post* in accordance with § 16-50/ (b). Copies of the legal notices and the publisher's certificates of publication are attached hereto as Exhibit F. In compliance with § 16-50/ (b), notices were sent to each person appearing of record as the owner of real property abutting the Property. Certification of such notice, a sample notice letter, and the list of property owners to whom the notice was mailed are included in Exhibit G.

### **IV. STATEMENT OF NEED AND BENEFIT**

#### **A. Statement of Need**

In amending the Communications Act of 1934 with the Telecommunications Act of 1996, the United States Congress recognized the important public need for high quality telecommunications services throughout the United States. The purpose of the Telecommunications Act of 1996 was to "provide for a competitive, deregulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies to all Americans." H.R. Conf. Rep. No. 104-458, 206, 104<sup>th</sup> Cong., Sess. 1 (1996). The Telecommunications Act of 1996 expressly preserved State and/or local land use authority over wireless facilities, placed several requirements and legal limitations on the exercise of that

authority, and preempted State or local regulatory oversight of radio frequency emissions as set forth in 47 U.S.C. § 332 (c) (7). In doing so, Congress sought a balance between the public interest in deployment of wireless services and legitimate areas of State and/or local regulatory control over wireless infrastructure.

The Facility is an integral component of T-Mobile's wireless network in the Town. There is a gap in coverage in this area of the Town, specifically along Route 15, Main Street and Highgate Road, as well as the surrounding area. The Facility would also provide future capacity relief and performance improvements to the existing facilities nearest the coverage objective. The Facility, in conjunction with other existing and future facilities in the Town and surrounding municipalities, is necessary for T-Mobile to provide wireless services to people living in and traveling through this area of the State.

The Town has also expressed a need to replace the existing 100 foot lattice tower, which is outdated and insufficient to address the Town's fire, police and emergency services communication needs. The Town has stated that it would need a new regional and municipal dispatch platform situated atop a taller structure, preferably 150 feet AGL. According to the Town, a platform for emergency services at this height would allow the Town to overcome the challenging topography of the area, as well as provide much needed coverage and allow for future growth.

The propagation plots, attached as Exhibit H, depict T-Mobile's need for the Facility. Based upon the location of the Facility and the current lack of coverage in this area, T-Mobile cannot readily predict when the Facility might reach maximum capacity.

## **B. Statement of Benefits**

T-Mobile is a leading provider of advanced wireless voice and data services throughout the United States. T-Mobile has provided such services in Connecticut since the mid-1990s and remains actively involved in the deployment of state-of-the-art wireless services. In recent years, the public's demand for traditional cellular telephone services has evolved to include expectations of seamless service, wherever the public travels, and readily available access to the internet as well as the ability to send and receive voice, text, image and video through their wireless devices continuously. The ever increasing availability and enhanced sophistication of wireless services has led the public to use their wireless devices as their primary form of communication for both personal and business needs.

To help provide the benefits of wireless technologies to all Americans, Congress enacted the Wireless Communications and Public Safety Act of 1999 ("911 Act"). The purpose of this legislation was to promote public safety through the deployment of a seamless, nationwide emergency communications infrastructure that includes wireless communications services. In enacting the 911 Act, Congress recognized that networks capable of rapid, efficient deployment of emergency services would enable faster delivery of emergency care, resulting in reduced fatalities and severity of injuries. With each year since the passage of the 911 Act, additional anecdotal evidence supports the public safety value of improved wireless communications in aiding lost, ill or injured individuals such as motorists, hikers and boaters.

As an outgrowth of the 911 Act, the FCC mandated that wireless carriers provide enhanced 911 services ("E911") as part of their communications networks. These

services ultimately allow 911 public safety dispatchers to identify a wireless caller's location within several hundred feet. T-Mobile has deployed and continues to deploy "Time Difference of Arrival" network technology to comply with the FCC E911 requirements. The Facility would become an integral component of T-Mobile's E911 network in this area of the state. As other wireless carriers expand their service in the Town through the Facility, E911 services would experience additional improvement.

### **C. Technological Alternatives**

The FCC licenses granted to T-Mobile authorize it to provide cellular and "Personal Communication Services" in this area of the State through deployment of a network of wireless transmitting sites. The Facility is a necessary component of T-Mobile's wireless network. The Facility would also allow other wireless carriers to provide services in this area.

Repeaters, microcell transmitters, distributed antenna systems and other types of transmitting technologies are not a practicable or feasible means to providing service within the sizeable coverage gap in this area. There are no equally effective technological alternatives to construction of a new tower facility for providing reliable personal wireless services in this area of Connecticut.

## **V. SITE SELECTION AND TOWER SHARING**

### **A. Site Selection**

T-Mobile selects a site in an area where there is an existing need or problem regarding coverage or capacity within T-Mobile's network. The site selected is the geographical location where the installation of a telecommunications facility would likely

address the identified coverage or capacity issue. T-Mobile conducts a site search with the goal of finding a site that would resolve the coverage or capacity issue and minimize any potential environmental impact.

T-Mobile conducted a site search within this area of the Town and identified the Property as the best possible location to resolve the existing coverage concerns. The nearest telecommunication facilities are already in use by T-Mobile. There are no other facilities or structures which T-Mobile could utilize to alleviate the existing coverage gap.

The proposed Facility would allow T-Mobile to provide coverage while at the same time minimize any environmental impacts. The site of the proposed Facility:

- Is located on a developed parcel and would replace an existing approximate 100 foot lattice tower;
- Is not located near any wetlands or watercourses;
- Would not require the removal or relocation of any trees; and
- Would accommodate a regional dispatch platform containing police, fire and emergency services antennas.

T-Mobile conducted an extensive site search with collaboration from the Town and some of the Town's citizens. See Part IX.A, *infra*. None of the other sites reviewed, or any other known and available sites, within the coverage objective, would provide adequate coverage and also allow for the same level of mitigation of environmental impacts as does the proposed site for the Facility.

The map of facilities within a four mile radius, along with the site selection narrative and map of rejected sites, Exhibits I and J, respectively, provide a thorough explanation of T-Mobile's methodology for conducting site searches, the actual search for potential sites in the Town, and depict the locations reviewed during T-Mobile's

search and the reasons for elimination from consideration of all but the Property. Due to the nature of development and terrain in the area, the Property is uniquely suited for a telecommunications tower.

### **C. Tower Sharing**

To promote the sharing of wireless facilities in the Town, T-Mobile proposes to construct a facility that can accommodate T-Mobile and 3 other wireless carriers. The Facility would also accommodate regional and municipal public safety antennas at no cost to the Town. Details of the design are included in Exhibit C.

## **VI. FACILITY DESIGN**

T-Mobile would lease a 490 square foot area within the Property, which is an approximately 2.30 acre parcel. The Facility would consist of a 150 foot monopole structure. T-Mobile would install its antennas with flush mounts at 140 feet AGL and place its equipment cabinets nearby. The Facility (including the equipment cabinets) would be secured and concealed by an 8 foot chain link fence with privacy slats.

A regional dispatch platform for emergency services would be situated atop the monopole. The height and configuration of the regional dispatch platform would be predicated on the Town's needs and specifications. As designed presently, the Town would use a 4 foot standoff T-boom antenna mount (as opposed to a full circular platform with walkway) and fiberglass, slim line whip antennas. These antennas would be painted sky blue to blend with the sky background. The municipal equipment would be located in a separate shelter adjacent to the area leased by T-Mobile.

The Facility would accommodate the various wireless carriers active in the Connecticut marketplace. Future carriers would have to finalize terms with the Town regarding ground space for equipment.

Vehicular access to the Facility would be across an existing bituminous access and parking area currently used by the police station. T-Mobile would extend utility service underground from an existing utility demarcation on Merwin Street. Exhibit C contains plans, descriptions and other relevant information for the Facility. Exhibit K is a wetlands inspection report and statement of compliance. Exhibit L is a listing of residential buildings within 1000 feet of the Facility. In summary, those exhibits reveal the following:

- The Facility would be on a developed parcel and would replace an existing approximate 100 foot lattice tower;
- The Facility would not be located near any wetland systems;
- The Facility would not require the removal or relocation of any trees;
- The Facility would host a regional dispatch platform with police, fire and emergency services antennae; and
- The Facility would incorporate a stealth design, including flush mounting for T-Mobile's antennas, privacy slats for the fencing surrounding T-Mobile's equipment shelter and slim profile mounting for the regional platform with painted, slim profile antennas.

## **VII. ENVIRONMENTAL COMPATIBILITY**

Pursuant to General Statutes § 16-50p, the Council is required to find and to determine as part of the Application process any probable environmental impact of the Facility on the natural environment, ecological balance, public health and safety, scenic, historic and recreational values, forest and parks, air and water purity and fish and

wildlife. As demonstrated in this Application and the accompanying attachments and documentation, the Facility would not have a significant adverse environmental impact.

**A. Visual Assessment**

The visual impact of the Facility would vary from different locations around the Facility depending upon factors such as vegetation, topography, distance from the Facility, and the location of structures around the Facility. Exhibit M contains a Visual Resource Evaluation. The Visual Resource Evaluation includes a computer-based, predictive viewshed model, which has proven to depict accurately the potential impact of the Facility from surrounding views.

T-Mobile retained visibility experts, Vanasse Hangen Brustlin, Inc. ("VHB"), to prepare the Visual Resource Evaluation. As part of its study, on March 2 and 17, 2010, VHB conducted balloon float tests at 150 and 173 feet AGL to evaluate the potential viewshed impacts, if any, associated with the Facility. At the request of the Connecticut State Historic Preservation Office ("SHPO"), on May 11, 2010, VHB conducted an additional balloon float to assess specifically the potential visual impact of the Facility on Route 15 (the Merritt Parkway). VHB conducted the balloon floats at these two heights to account for the top of the monopole structure as well as the height of the regional dispatch platform antennae (as initially configured). With these balloon floats, VHB sought to determine the visual impact of the Facility, accounting for local, state and federal historic and recreational sites, within a 2 mile radius of the proposed Facility ("Study Area"). Exhibit M also includes affidavits for each balloon float. Thereafter, VHB finalized its Visual Resource Evaluation to address the reconfigured Facility as discussed in more detail in Part IX.A, *infra*, and as depicted in Exhibit C.

The topography and vegetation contained at the Property and within the Study Area serve to minimize the potential visual impact of the Facility. The existing vegetation in the area of the Property is mixed deciduous hardwood species with an average estimated height of 60 feet. This vegetation sits on rolling hills that range in ground elevation from approximately 85 feet above mean sea level ("AMSL") to approximately 490 feet AMSL. The tree canopy covers nearly 4,096 acres of the 8,042 acre Study Area. The Study Area includes 202 linear miles of roadways and 164 acres of surface water (including portions of Canoe Brook Lake and Lake Forest).

Based on the viewshed analysis contained in Exhibit M, areas from which the Facility would be at least partially visible year round comprise 46 acres within the 8,042 acre Study Area, which is approximately one-half of 1 percent of the total Study Area. The majority of these views would be within the immediate area of the proposed Facility (approximately 0.25 miles). There are also some isolated views to the northwest, west and southwest approximately 0.60 to 0.90 miles from the Facility. The Facility would be partially visible year round to 71 residential properties within the Study Area.

Areas of seasonal visibility would comprise of approximately 42 additional acres, primarily within the immediate vicinity of the proposed Facility. The proposed Facility would be visible during leaf-off conditions from areas to the northwest, west, southwest and northeast of the Property. These areas are generally adjacent to the areas of year-round visibility and range in distance from approximately 0.35 miles to 0.85 miles. Approximately 48 additional residential properties would have seasonal views of the proposed Facility.

Additionally, the balloon float performed on May 11, 2010, confirmed that the Facility would not have an adverse visual impact on Route 15. The only view would be from an overpass associated with Interstate 84. The results of the additional balloon float are consistent with VHB's earlier field studies. See Exhibits M and P.

The Visual Resources Evaluation demonstrates that the Facility would be as inconspicuous as possible, particularly beyond the immediate vicinity of the Property. The stealth configuration regarding T-Mobile's antennas and the Town's regional dispatch platform would serve to minimize the visual impact of the proposed Facility. Accordingly, the proposed Facility would not result in an unacceptable adverse visual impact. Weather permitting, T-Mobile will raise a balloon with a diameter of at least three (3) feet at the Facility on the day of the Council's first hearing session on this Application, or at a time otherwise specified by the Council.

#### **B. Solicitation of State Agency Comments**

T-Mobile submitted a request for review and comment for the Facility to the SHPO and obtained the necessary maps from the database of the Connecticut Department of Environmental Protection ("DEP"). At the SHPO's request, on May 11, 2010, VHB conducted an additional balloon float to assess the potential visual impact of the Facility on the Merritt Parkway (Route 15). The SHPO determined that no adverse impact is anticipated. See Part VII.A and VII.D. The DEP map reveals that the Facility would not be near a wetlands system or any critical habitats. Additionally, the United States Fish and Wildlife Service ("USFW") confirmed that there are no threatened or endangered species in the Town. Copies of the SHPO and USFW correspondence, as well as the DEP mapping regarding the Facility are attached hereto as Exhibit N.

### **C. MPE Limits/Power Density Analysis**

In August 1996, the FCC adopted a standard for exposure to Radio Frequency ("RF") emissions from telecommunications facilities like the Facility proposed in this Application. To ensure compliance with applicable standards, T-Mobile performed maximum power density calculations for the Facility assuming that the antennas were pointed at the base of the tower and all channels were operating simultaneously. The resulting power density for T-Mobile's operations would be approximately 5.7022 percent of the applicable Maximum Permissible Exposure (MPE) standards. A copy of the power density calculations and report for the Facility is attached hereto as Exhibit O.

### **D. Other Environmental Factors**

The Facility would be unmanned, requiring infrequent monthly maintenance visits by each carrier that would last approximately one hour. T-Mobile's equipment at the Facility would be monitored 24 hours a day, 7 days a week from a remote location. The Facility would not require a water supply or wastewater utilities. No outdoor storage or solid waste receptacles would be needed, and the Facility would not create or emit any smoke, gas, dust or other air contaminants, noise, odors or vibrations. The construction and operation of the proposed Facility would have no significant impact on air, water, or noise quality.

T-Mobile retained EBI Consulting ("EBI") to evaluate the Facility in accordance with the FCC's regulations implementing the National Environmental Policy Act of 1969 ("NEPA"). A copy of the NEPA Summary Report is attached hereto as Exhibit P.

The site of the Facility is not designated as a wilderness area and it is not located in any areas identified as a wildlife preserve or in a USFW National Wildlife Refuge.

The Facility would not affect threatened or endangered species or designated critical habitats. There are no threatened or endangered species located in the Town. Additionally, the proposed tower would not impact migratory bird species since the height would be below 200 feet, would not include guy wires and would not require lighting. See Exhibits N and P.

There are no National Parks, National Forests, National Parkways or Scenic Rivers, State Forest, State Designated Scenic Rivers or State Gamelands located in the vicinity of the site of the Facility. Furthermore, according to the site survey and field investigations, the Facility would not impact any federal or state regulated wetlands or watercourses. In addition, the Facility would not be located within a floodplain.

The Facility would not affect any sites, buildings, structures or objects significant to American history, architecture, culture, archeology or engineering. On May 26, 2010, the SHPO issued a letter stating that the Facility would not impact such resources. The SHPO issued this statement after a field review that included an additional balloon float and evaluation of the Facility's impact on Route 15 (the Merritt Parkway).<sup>1</sup>

EBI also consulted with four Native American Indian tribes – the Delaware Nation, the Mashantucket Pequot Tribe, the Narragansett Indian Tribe and the Delaware Tribe of Indians of Oklahoma – because they might have interests impacted by the construction, operation and maintenance of the Facility. All four Tribes confirmed that they do not have any interests that would be impacted by the Facility. As such, the

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<sup>1</sup> On November 15, 2010, the SHPO issued a concurrence after receiving updated information on the Facility's compound area. On July 1, 2011, EBI requested an additional concurrence from the SHPO based upon the reconfiguration as depicted in Exhibit C. As discussed in Part IX.A, *infra*, the reconfiguration incorporates certain stealth measures and reduces the overall height by approximately 2 feet. The SHPO has not responded to date; however T-Mobile anticipates a concurrence because the reconfiguration reduces the potential visual impact of the Facility.

Facility is categorically excluded from any requirement for further environmental review by the FCC in accordance with the NEPA and no permit is required by the FCC prior to construction of the proposed Facility. See 47 C.F.R. §§ 1.1306(b) and 1.1307(a). A copy of the Tribal Consult is included in Exhibit P.

## **VIII. CONSISTENCY WITH THE TRUMBULL LAND USE REGULATIONS**

The Facility would be consistent with Trumbull's Zoning and Wetland Regulations and Plan of Conservation and Development. This section includes an analysis of the Facility under the Town's land use regulations, as well as a description of the planned and existing uses of the Property.

### **A. Trumbull Plan of Development**

The Trumbull Plan of Conservation and Development ("Plan"), a copy of which is included in the bulk filing, was adopted on April 12, 2006, as amended on July 19, 2006. The Plan addresses wireless telecommunications. According to the Plan, "the Trumbull Planning and Zoning Commission recognizes the vital importance of . . . police, fire, emergency, and first-responder personnel in responding to emergencies. Emergency personnel must be able to communicate with one another efficiently and effectively. Cellular communication is a secondary means of communication for our emergency personnel and in some situations could become a primary means of communication." (Emphasis added.) See Bulk Filing, July 19, 2006, Amendment to § 10.2. The Facility would accommodate a regional dispatch platform with police, fire and emergency services antennae. Additionally, the Facility would improve wireless services in the area thereby allowing for better communication between the Town and the ever increasing

number of individuals who rely primarily or exclusively on wireless services for communication. Accordingly, the Facility would further some of the objectives articulated by the Plan.

#### **B. Trumbull Zoning Regulations**

Article XII of the Trumbull Zoning Regulations ("Regulations") addresses telecommunications facilities. See Bulk Filing, Trumbull Zoning Regs. art. XII. Article III of the Regulations addresses setback requirements. The Facility comports with a majority of these requirements, including the following:

- The Facility would meet the setback requirements for structures in a Residence A zone. See Exhibit C and Trumbull Zoning Regs. art. III and art. XII, § 5.P ("tower setbacks shall be measured from the base of the tower . . . to the nearest point along each property line of the parcel on which it is located.")
- The Facility would not impact negatively the general safety, welfare and quality of life on the community. It would provide enhanced wireless service and emergency services. Trumbull Zoning Regs. art. XII, § 1.7.
- The Facility would incorporate stealth measures to minimize the visual impact of the Facility, including flush mounting for T-Mobile's antennas, a slim profile mount and slim, painted antennas for the regional platform. T-Mobile would also incorporate privacy slats in the fence surrounding T-Mobile's compound. Trumbull Zoning Regs. art. XII, § 1.8.
- The Facility would encourage co-location as it would accommodate 3 additional carriers and a regional dispatch platform. Trumbull Zoning Regs. art. XII, § 1.9 and 5.I.
- On its own initiative, T-Mobile retained an independent consultant to evaluate the RF levels of the existing lattice tower, which hosts municipal communication equipment, and compare those measurements to the anticipated RF emissions of the proposed Facility. Trumbull Zoning Regs. art. XII, § 5.A.
- The Facility would include security fencing not less than 8 feet in height and would be gated. Trumbull Zoning Regs. art. XII, § 5.E.

- The monopole would not exceed 150 feet AGL (although the regional dispatch platform would do so). Trumbull Zoning Regs. art. XII, § 5.G.
- The Facility would not have any lighting attached to it — other than as required by the FAA. Trumbull Zoning Regs. art. XII, § 5.M.

#### **C. Planned and Existing Land Uses**

The Property is currently used as the Town's police station. T-Mobile is not aware of any future development plans regarding the Property.

#### **D. Trumbull Inland Wetlands and Watercourses Regulations**

The Trumbull Inland Wetlands and Watercourses Regulations ("Wetlands Regulations") regulate certain activities conducted in or adjacent to "wetlands" as defined therein. Regulated activities include the "removal or deposition of material, or any obstruction, construction, alteration or pollution . . . and any earth moving, filling, construction, or clear-cutting trees . . ." in or of a wetland or watercourse and in adjacent areas. See Bulk Filing, Inland Wetlands and Watercourses Regulations, § 2.1. The Wetlands Regulations also define a "regulated activity" to include any activity as defined above within 100 feet of a wetland or watercourse. See *id.*

T-Mobile retained VHB to determine whether there are any wetlands located near the proposed Facility. There are none on the Property. The nearest wetland is a disturbed wetland area associated with the front yard of an existing residence about 175 feet southeast of the Property on the opposite side of Merwin Street. Because of the distance from the Facility to the nearest wetland, VHB concluded that the Facility would not directly or indirectly impact any wetland or watercourse. See Exhibit K.

**IX. CONSULTATIONS WITH LOCAL, STATE AND FEDERAL OFFICIALS**

**A. Local Consultations**

General Statutes § 16-50/ (e) requires an applicant to consult with the local municipality in which a proposed facility may be located and with any adjoining municipality having a boundary of 2,500 feet from the proposed facility concerning the proposed and alternate sites of the facility. On December 23, 2009, T-Mobile submitted a technical report to the First Selectman, the Honorable Timothy M. Herbst, regarding the Facility. The technical report, a copy of which is being bulk filed with this Application, included specifics about the Property, the Facility, the site selection process and the environmental effects, if any, of the proposed Facility. A copy of the cover letter submitted with the technical report is attached as Exhibit Q.

The Town has required that T-Mobile position the regional dispatch platform atop the monopole at 150 feet AGL. Town's representatives confirmed that this height would meet the Town's emergency services needs and also allow for future growth.

T-Mobile has engaged in extensive consultation with the Town and its citizens. On January 29, 2010, representatives of T-Mobile met with the First Selectman; Police Chief, Thomas H. Kiely; and one of the Town's attorneys, Douglas E. LoMonte, to discuss the proposed Facility. They outlined the proposal and addressed questions the Town representatives raised regarding need, environmental impacts and specific project details. T-Mobile also met separately with Police Chief Kiely, Attorney LoMonte and representatives of the Police Union. T-Mobile answered questions posed by the union representatives about health and safety concerns.

To address the Police Union's concerns further, T-Mobile retained an independent RF engineer to assess the RF levels of the existing lattice tower, which hosts municipal communication equipment, and compare those measurements to the anticipated RF emissions of the proposed Facility.

On February 24, 2010, Ronald E. Graiff, P.E., met with representatives of T-Mobile, Police Union representatives and Police Chief Kiely at the Property. Mr. Graiff conducted a field study of the RF emissions emitted from the existing lattice tower at various locations on the Property in the presence of the Police Union and T-Mobile representatives. Thereafter, Mr. Graiff completed a report, independently of T-Mobile, which concluded that the Facility would produce RF emissions well below any local, state, federal or international exposure standards. The report also concluded that the Facility, as proposed, would reduce some of the current exposure levels as the municipal equipment would be elevated to a greater height on the proposed Facility. On March 25, 2010, T-Mobile provided the Town with a copy of the report. The report and related correspondence are attached hereto as Exhibit Q.

T-Mobile also met with representatives of the community on several occasions. On July 15, 2010, representatives of T-Mobile met with representatives of the Town, the Police Union and the community to discuss the proposed Facility. T-Mobile answered questions about the Facility and agreed to work with the community to ensure that there were no other feasible alternatives to the Facility as proposed.

On September 3, 2010, and December 3, 2010, representatives of T-Mobile met with representatives of the community to discuss alternative sites for the proposed Facility. The community representatives asked whether T-Mobile could locate a

telecommunications facility at (1) the Stop & Shop Plaza located at 100 Quality Street; (2) an undeveloped parcel located at 5065 Main Street, adjacent to the Trumbull Mall; or (3) any of the municipal properties rejected by the Town previously. T-Mobile investigated each of these suggestions and determined that none were feasible alternatives. The reasons are outlined below:

1. 100 Quality Street. This parcel hosts a Stop & Shop plaza. T-Mobile's RF engineers reviewed the plaza's 25 foot rooftop and determined that it is too far north to provide coverage to the coverage objective. Additionally, the property owner is not interested in leasing space for a free-standing telecommunications facility.
2. 5065 Main Street. This parcel is undeveloped and located adjacent to the Trumbull Mall. The property owner is not interested in leasing space for a telecommunications facility. Additionally, T-Mobile is one of the wireless carriers using a rooftop installation on the Trumbull Mall.
3. 5866 Main Street. This parcel hosts the Town Hall. T-Mobile's RF engineers reviewed the cupola and determined that the height was insufficient to afford adequate coverage to the target area.
4. 366 Church Hill Road. This parcel hosts the Town's Department of Public Works/Highway Garage. There are no suitable structures on this parcel for co-location. The terrain would require a very tall structure on this parcel, perhaps in excess of 250 feet.

On November 15, 2010, representatives of T-Mobile met with the First Selectman to ensure that no other feasible alternatives exist. They discussed municipal properties in the area, including the Department of Public Works property and Island Brook Park. The Town has not expressed an interest in leasing these properties to T-Mobile for a telecommunications facility. T-Mobile also investigated whether 965 Church Street, a privately owned parcel, would work to alleviate the coverage objective. That parcel would not address the coverage objective because of the topography. Based upon this

extensive consultation with the Town and its citizens, T-Mobile has concluded that the Property is the best site for the Facility.

On April 14, 2011, May 26, 2011 and June 30, 2011, representatives of T-Mobile met with representatives of the Town, representatives of Northeast Communications (the Town's telecommunications consultant) and representatives of the community. These discussions focused on the Town's requirements for the regional platform, which would support police, fire and emergency service communications.

As a result of these discussions, T-Mobile and the Town modified the Facility design to accommodate the requests of the community representatives. T-Mobile would implement the following stealth measures: (1) flush mounts, as opposed to T-arms and (2) T-Mobile would include privacy slats to shield the Facility compound. With respect to the regional dispatch platform, the Town agreed to implement the following stealth devices: (1) the use of fiberglass, slim line whip antennas (eliminate dipoles); (2) antennas painted sky blue to blend with the sky background; (3) the reduction of the overall height of the Facility from 173'4" to 171'6" AGL by reducing the height of the regional platform antennas to include 3 whip antennas at 3'2", 2 whip antennas at 9'6", 4 whip antennas at 16" and 1 whip antenna at 21'6"; and (4) the use of 4 foot standoff T-boom antenna mounts as opposed to a walk-around platform.

Moreover, the Facility would accommodate several other requests by the community. The Facility would be surrounded by an 8 foot fence (with privacy slats). The equipment within the fencing would comply with all applicable codes. Additionally, the Facility would only require lighting when a technician is on site to perform

maintenance. Finally, T-Mobile's cables would be installed internally to minimize any adverse visual impact.

T-Mobile has engaged in an extensive municipal consultation with the Town, the Town's telecommunications consultant, the Police Union and the community. This consultation has spanned approximately 18 months – since the submission of the Technical Report on December 23, 2009 – included many meetings with the community and the retention of an independent RF consultant. Throughout this consultation, T-Mobile has vetted the area for possible alternative locations, worked with the Town and the community to address possible changes to the regional platform and reconfigured the proposed Facility to accommodate the requests of the Town and its citizens.

#### **B. Consultations with State Officials**

As noted in Section VII.B of this Application, T-Mobile consulted with the SHPO and obtained a DEP map from the DEP's database in the course of its NEPA survey. Copies of the correspondence with SHPO and the DEP map are attached hereto as Exhibit N.

#### **C. Consultation with Federal Agencies**

T-Mobile received a report from SiteSafe concerning compliance with the Federal Aviation Administration ("FAA") for the Facility, which is attached hereto as Exhibit R. The results indicate that the Facility would not require FAA registration, let alone FAA review as a potential air navigation obstruction or hazard. Therefore, no FAA lighting or marking would be required for the towers proposed in this Application. See Exhibit R.

T-Mobile's FCC license permits it to modify its network by building wireless facilities within its licensed area without prior approval from the FCC provided that a

proposed facility does not fall within one of the "listed" categories requiring review under NEPA. The "listed" categories, included in 47 C.F.R § 1.1307, are activities that may affect wilderness areas, wilderness preserves, endangered or threatened species, critical habitats, National Register historic districts, sites, buildings, structures or objects, Indian religious sites, flood plains and federal wetlands. The resulting report, attached hereto as Exhibit P, confirm that the Property does not fall under any of the NEPA "listed" categories of 47 C.F.R. §1.1307. Therefore, the proposed Facility does not require review by the FCC pursuant to NEPA.

#### **X. ESTIMATED COST AND SCHEDULE**

##### **A. Overall Estimated Cost**

The total estimated cost of construction for the Facility is \$250,000.00. This estimate includes:

- (1) Tower and foundation costs (including installation) of approximately \$135,000.00;
- (2) Site development costs of approximately \$70,000.00; and
- (3) Utility installation costs of approximately \$45,000.00.

##### **B. Overall Scheduling**

Site preparation and engineering would commence immediately following Council approval of T-Mobile's Development and Management ("D&M") Plan and is expected to be completed within four (4) to five (5) weeks. Installation of the monopole structure, antennas and associated equipment is expected to take an additional eight (8) weeks. The duration of the total construction schedule is approximately thirteen (15) weeks.

Facility integration and system testing is expected to require an additional two (2) weeks after the construction is completed.

**XI. CONCLUSION**

This Application and the accompanying materials and documentation demonstrate that a public need exists in the Town for improved wireless services and that the Facility would not have any substantial adverse environmental effects. The Facility would also enhance the Town's communications needs for emergency services. T-Mobile, therefore, respectfully submits that the public need for the Facility outweighs any potential environmental effects resulting from the construction of the Facility, and that the Council should grant a Certificate of Environmental Compatibility and Public Need for the Facility.

**Respectfully Submitted,**

**T-MOBILE NORTHEAST LLC**

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